

ABSTRACT

Load fluctuation of a refrigerating cycle under severe conditions needs to be overcome. For instance, a compressor driver which can positively drive the compressor employed even in a vehicle is desirable. To be more specific, at the start of the compressor, a phase of the current flowing in the motor is controlled to be ahead of an induction voltage, then the advancement of the phase is controlled to decrease. Under an unstable condition to detect a position, such as at the start under pressure-difference, the foregoing control allows the phase to advance up to the current-phase where the max. torque can be produced, thereby drawing the instantaneous max. torque of the motor for starting the compressor. Then the control reduces the advancement for obtaining a stable operation. This control method can realize a compressor driver having start-performance enough to overcome pressure-difference.